

***CTE Standards Unpacking***  
***Digital Production for Entertainment***

**Course:** Digital Production for Entertainment

**Course Description:** Digital Production for Entertainment prepares students to extend their knowledge of computer programming and design. Students will be given opportunities to design, implement, and present meaningful entertainment through a variety of media.

**Career Cluster:** Arts, A/V Technology, Communications

**Prerequisites:** Algebra I or Programming I

**Program of Study Application:** Digital Production for Entertainment is a Level IV pathway course appropriate for two pathways in the Arts/AV Technology & Communications cluster: Telecommunications/A-V Technology & Film and Visual Arts.

<b>INDICATOR #DPE 1: Develop an Awareness of Opportunities and Professionalism in Digital Entertainment careers</b>		
<b>SUB-INDICATOR 1.1 (Webb Level: 2 Skill/Concept):</b> Identify personal interests and abilities related to careers in digital entertainment		
<b>SUB-INDICATOR 1.2 (Webb Level: 2 Skill/Concept):</b> Investigate opportunities, trends, and requirements related to careers in digital entertainment		
<b>SUB-INDICATOR 1.3 (Webb Level: 3 Strategic Thinking):</b> Demonstrate job skills for digital entertainment industries.		
<b>SUB-INDICATOR 1.4 (Webb Level: 3 Strategic Thinking):</b> Explore legal and ethical issues related to digital entertainment		
<b>Knowledge (Factual):</b> -Employability skills.  -Various avenues for careers in digital production.  -Requirements for careers.  -Copyright and ethics laws.  -Available career options locally, regionally and worldwide.  -Skills required for digital production for entertainment.	<b>Understand (Conceptual):</b> -How to work as part of a team and take direction from others.  -Why proper application of employability skills can help careers advance.  -Current trends in digital entertainment production.  -Diverse opportunities for utilization of digital production in entertainment.  -How multimedia laws protect creators and users. -Consequences of ignoring	<b>Do (Application):</b> -Complete a personal interest self-assessment.  -Identify personal creative talents.  -Identify technical/developer talents.  -Research job opportunities.  -Investigate trends associated with digital entertainment  -Chart related career pathways.

	multimedia laws.	-Research instruction and forms for registration of digital entertainment products.
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**Benchmarks:**

*Students will be assessed on their ability to:*

- Complete a web quest on legal issues related to digital production for entertainment and present findings.
- Compare and contrast two or more career opportunities within the digital production in entertainment industry.

***Academic Connections***

<b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b>	<b>Sample Performance Task Aligned to the Academic Standard(s):</b>
RI.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem	-Career Exploration
SL.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	-Comparison/contrast of career opportunities

**INDICATOR #DPE 2: Identify and Analyze Basic Entertainment Design Elements**

**SUB-INDICATOR 2.1 (Webb Level: 2 Skill/Concept):** Explore basic entertainment design elements.

**SUB-INDICATOR 2.2 (Webb Level: 2 Skill/Concept):** Explore the fundamentals of entertainment art.

<p><b>Knowledge (Factual):</b></p> <ul style="list-style-type: none"> <li>-Design influences on consumers.</li> <li>-Apps and websites for creation of simple to complex products.</li> <li>-Shading</li> <li>-Basics of Color &amp; Color Palettes.</li> </ul>	<p><b>Understand (Conceptual):</b></p> <ul style="list-style-type: none"> <li>-Basic graphic design elements.</li> <li>-Entertainment and app trends.</li> <li>-How interface and feedback impact playability.</li> <li>-How product success is determined by design and game play.</li> </ul>	<p><b>Do (Application):</b></p> <ul style="list-style-type: none"> <li>-Analyze consumer trends.</li> <li>-Compare a variety of entertainment applications for playability.</li> <li>-Apply conceptual ideas to game creation.</li> </ul>
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**Benchmarks:**  
*Students will be assessed on their ability to:*

- Write an entertainment storyline, using appropriate visualization and sound elements to meet specified expectations.
- Evaluate and rate a multileveled entertainment application for design elements and fundamentals of art.

**Academic Connections**

<p><b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b></p> <p>RI.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text</p> <p>W.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the</p>	<p><b>Sample Performance Task Aligned to the Academic Standard(s):</b></p> <p>-Use of career appropriate terminology to meet storyline specifications</p> <p>-Evaluations of design and art fundamentals</p>
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text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	
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<b>INDICATOR #DPE 3: Create and Design Entertainment Projects</b>		
<b>SUB-INDICATOR 3.1 (Webb Level: 3 Strategic Thinking):</b> Design and implement procedures and timelines.		
<b>SUB-INDICATOR 3.2 (Webb Level: 4 Extended Thinking):</b> Develop Digital Production Components and Resources		
<b>Knowledge (Factual):</b> -Time management.  -Planning and implementation steps.  -Importing and organizing resources.	<b>Understand (Conceptual):</b> -Importance of planning a storyline.  -Pseudo Code and how to use it.  -Image optimization for file size.  -File management	<b>Do (Application):</b> -Evaluate a video game project  -Write Pseudo Code (Sentence Format)  -Create Appropriate Data Size Graphics (Low Data Volume)  -Import Resources into Root Folders
<b>Benchmarks:</b> <i>Students will be assessed on their ability to:</i> <ul style="list-style-type: none"> <li>Develop and implement a checklist and timeline plan for creating a design entertainment project.</li> <li>Create a Table of Object and Events (TOE) and present for peer review.</li> <li>Design a sales pitch for a product using originally written Pseudo Code, appropriate graphics and related resources.</li> </ul>		
<b>Academic Connections</b>		
<b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b>  SL.1. Initiate and participate effectively	<b>Sample Performance Task Aligned to the Academic Standard(s):</b>  -Peer Review of Table of Object and	

<p>in a range of collaborative discussions</p> <p>SL.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</p>	<p>Events</p> <p>-Sales Pitch for a product</p>
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<b>INDICATOR #DPE 4: Demonstrate Knowledge of Software Development processes</b>		
<b>SUB-INDICATOR 4.1 (Webb Level: 3 Strategic Thinking):</b> Identify and utilize software development methodology		
<b>SUB-INDICATOR 4.2 (Webb Level: 2 Skill/Concept):</b> Utilize tools for developing software applications.		
<b>SUB-INDICATOR 4.3 (Webb Level: 3 Strategic Thinking):</b> Apply language specific programming tools/techniques.		
<p><b>Knowledge (Factual):</b></p> <ul style="list-style-type: none"> <li>-Software tools.</li> <li>-Testing procedures for projects in development stage(s).</li> <li>-Design process.</li> <li>-Different development environments to create software.</li> <li>-Various programming languages to develop apps and games.</li> </ul>	<p><b>Understand (Conceptual):</b></p> <ul style="list-style-type: none"> <li>-Coding principles.</li> <li>-Roles of development team members (e.g., graphic artist, programmer, game analyst).</li> <li>-Concepts of data and procedure representation.</li> <li>-Game function.</li> <li>-Object-oriented, event-driven design.</li> <li>-Modeling and analyzing functional requirements (e.g., dataflow diagrams, process specifications, and a data dictionary).</li> <li>-Software development</li> </ul>	<p><b>Do (Application):</b></p> <ul style="list-style-type: none"> <li>-Demonstrate knowledge of system analysis issues related to design, testing, implementation, and maintenance.</li> <li>-Identify and evaluate roles of team members/customers in the software development process.</li> <li>-Identify and assess constraints of the current project.</li> <li>-Use prototyping techniques.</li> <li>-Use desk checking.</li> </ul>

	environment  -What prototypes are and how designers use them.	
<b>Benchmarks:</b> <i>Students will be assessed on their ability to:</i> <ul style="list-style-type: none"> <li>Identify and analyze the applicability of structured, object oriented, event-driven logical design methods.</li> <li>Design system input, output, processing and interfaces for peer review.</li> </ul>		
<b>Academic Connections</b>		
<b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b>  L.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.  SL.1. Initiate and participate effectively in a range of collaborative discussions	<b>Sample Performance Task Aligned to the Academic Standard(s):</b>  -Use appropriate career terminology for Logical Design methods  -Peer Review of design system	

<b>INDICATOR #CE 5: Identify and Utilize a Programming Environment</b>		
<b>SUB-INDICATOR 5.1 (Webb Level: 4 Extended Thinking):</b> Develop an application using selected programming language or software.		
<b>SUB-INDICATOR 5.2 (Webb Level: 4 Extended Thinking):</b> Evaluate and troubleshoot an application for distribution.		
<b>Knowledge (Factual):</b> -Troubleshooting processes.  -Notation  -Compilers	<b>Understand (Conceptual):</b> -Specific language syntax.  -How pseudo code can be transformed to actual code.  -Multiple avenues of	<b>Do (Application):</b> -Translate logical design into code in an appropriate language argument.  -Compile and debug

	<p>program testing.</p> <p>-Coding/coding concepts.</p> <p>-Distribution principles.</p>	<p>code.</p> <p>-Prepare code documentation.</p> <p>-Conduct code walkthrough and/or inspection.</p> <p>-Troubleshoot unexpected results.</p> <p>-Access needed information using company and manufacturers' references.</p>
<p><b>Benchmarks:</b></p> <p><i>Students will be assessed on their ability to:</i></p> <ul style="list-style-type: none"> <li>• Design and create a video game.</li> <li>• Develop programs using appropriate environment and language, defending choices.</li> <li>• Using a code of choice, create an application for peer reviews.</li> </ul>		
<b><i>Academic Connections</i></b>		
<p><b>ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):</b></p> <p>SL.1. Initiate and participate effectively in a range of collaborative discussions</p> <p>L.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or</p>	<p><b>Sample Performance Task Aligned to the Academic Standard(s):</b></p> <p>-Peer review of code choice</p> <p>-Appropriate use of language to defend program choice</p>	

phrase important to comprehension or expression.	
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### **Additional Resources**

Please list any resources (e.g., websites, teaching guides, etc.) that would help teachers as they plan to teach these new standards.

<https://developer.android.com/training/basics/firstapp/index.html>

<https://developer.apple.com/library/content/referencelibrary/GettingStarted/DevelopiOSAppsSwift/>

<https://developer.mozilla.org/en-US/Apps/Tutorials/General>

<https://www.codecademy.com/>

<https://www.python.org/about/gettingstarted/>

<https://codecombat.com/play/level/codewarrior>

<https://www.khanacademy.org/>

<https://scratch.mit.edu/>